

Serial No. 10/657,874

RD-29,557-4

REMARKS**Summary**

In the Office Action dated October 7, 2005, claims 1-21 were rejected. Applicant has canceled claims 1-12, 14 and 21 and added claims 22 and 23. Accordingly, claims 13, 15-20, 22 and 23 are pending.

Applicant notes that the Examiner has not indicated in the Office Action Summary whether the drawings for the above-captioned application are acceptable. Applicant will assume that the drawings are acceptable unless the Examiner indicates otherwise.

Applicant respectfully requests reconsideration of the application by the Examiner in light of the above amendments and the following remarks.

Rejections under 35 USC §103(a)

Claims 1-10 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Oles (U. S. Pat. No. 3,246,493), Takeda (U. S. Pat. No. 4,813,247) or Severns et al. (U.S. Pat. No. 6,691,536) in view of France et al. (U. S. Pat. No. 6,840,069). Applicant has canceled claims 1-10 and 21 thereby rendering the rejection to these claims as moot.

Claims 12-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over France et al. for reasons similar to those given with respect to claims 2-10. Claims 2-10 were rejected as no patentable distinction was deemed to exist in the sensor as claimed and the sensors as taught by France since France discloses that "many sensors can operate with the present invention". The sensors were deemed to be functional equivalence of each other.

Serial No. 10/657,874

RD-29,557-4

Applicant has amended claims 13, 15 and 18 to recite a specific sensor structure that Applicant submits is not taught or suggested by France. In particular, amended claim 13 rewritten in independent form recites a spectroscopic solvent vapor sensor selectively responsive to siloxane absorbance of infrared radiation having wavelengths in a near or mid-infrared range. Claims 22 and 23 further claim the infrared ranges of about 2300nm-2500nm and about 9200nm, respectively. It has been determined by the Applicants that these wavelengths are useful for siloxane detection and show no or very little interference from water vapor.

Furthermore, amended claim 15 rewritten in independent form is drawn to a piezo-based sensor including a quartz crystal microbalance element including a transducer film that selectively absorbs the siloxane solvent vapor. Likewise, amended claim 18 rewritten in independent form is drawn to a strain based sensor having a sensing element including a transducer film. In each claim set, the transducer films are further said to separately comprise a non-polar polymer and a hydrocarbon chain. Applicant submits that in claims 15 and 18 and the associated dependent claims, the transducer film facilitates selective detection of siloxane which is not taught or suggested by France.

Accordingly, Applicant submits that claims 13, 15-20, 22 and 23 are allowable for at least the reasons set forth above.

Rejections under 35 USC §102

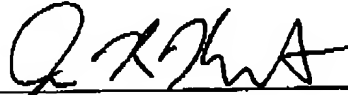
Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by France et al. Applicant has canceled claim 11 thereby rendering the rejection to claim 11 as moot.

Serial No. 10/657,874

RD-29,557-4

Applicant respectfully requests reconsideration of this application. If the Examiner has any questions regarding the present patent application, the Examiner is invited to call Applicant's attorney.

Respectfully submitted,



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